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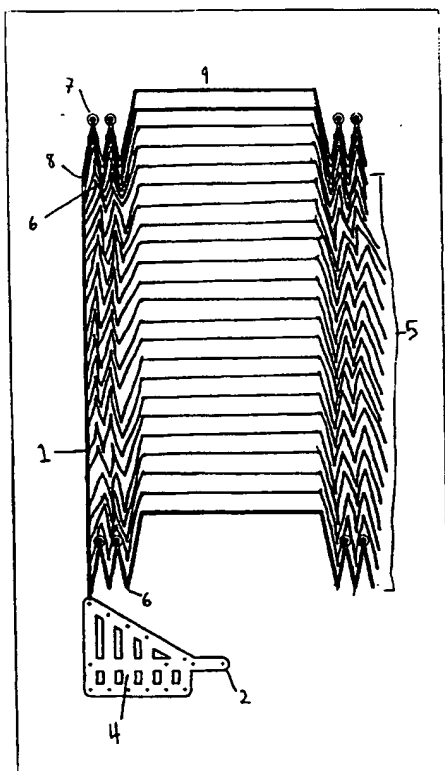
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- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DEVICE AND METHOD FOR PREPARING A SAMPLE FOR ANALYSIS



(57) Abstract: The invention provides apparatus and methods for dividing a sample, into a plurality of subsamples without the need for pipetting or for other manual operations. Sample is placed, via inlet (2) into sample reservoir (4) in fluid communication with a main charging channel (1) which, in turn, is in fluid communication with a plurality of fractionation channels (5), with valves and vents and terminal purge channel (9). Prior to its use, the plate described above is mated with a receptacle plate, for receiving subsample via fractionation channel valves (6), and to a lid which seals the channels against leakage. The sealed device is subjected to centrifugation in order to distribute sample.



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INTERNATIONAL SEARCH REPORT

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PCT/US 01/06118

A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01L C12Q B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	US 5 798 215 A (RIBI HANS O ET AL) 25 August 1998 (1998-08-25) column 6, line 37 -column 6, line 54 column 8, line 18 -column 9, line 58 column 10, line 24 -column 10, line 57 column 16, line 53 -column 17, line 6 column 17, line 28 -column 17, line 48 figures 1-8 ---	1-3,7,8, 10,12
A	EP 0 803 288 A (KYOTO DAIICHI KAGAKU KK) 29 October 1997 (1997-10-29) column 19, line 6 -column 20, line 35 column 22, line 17 -column 23, line 12 column 26, line 40 -column 27, line 50 figures 7,9,13 --- -/--	1-3,10, 12,13, 15,16,21

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☒ Patent family members are listed in annex.

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O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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8 document member of the same patent family

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 58245 A (AMERSHAM PHARM BIOTECH AB ; ALLMER KLAS (SE); ANDERSSON PER (SE): L) 18 November 1999 (1999-11-18) page 2, line 7 -page 2, line 21 page 3, line 3 -page 3, line 22	1-3, 5, 7, 8
A	page 10, line 8 -page 11, line 25 example 2 figures 6, 8	4, 6, 9
A	--- US 5 338 666 A (MONTHONY JAMES F ET AL) 16 August 1994 (1994-08-16) column 5, line 1 -column 5, line 6 column 7, line 31 -column 8, line 5 column 8, line 26 -column 8, line 34 column 8, line 43 -column 8, line 62	1, 12, 13, 16, 21, 27, 28
A	--- WO 99 60397 A (UNIV WASHINGTON) 25 November 1999 (1999-11-25) page 3, line 7 -page 4, line 5 page 16, line 20 -page 17, line 6 figure 12 -----	16

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/06118

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5798215	A	25-08-1998	US 5660993 A	26-08-1997
			US 5503985 A	02-04-1996
			US 5399486 A	21-03-1995
			CA 2173358 A1	29-02-1996
			EP 0729579 A1	04-09-1996
			JP 9504615 T	06-05-1997
			WO 9606354 A1	29-02-1996
			CA 2156412 A1	01-09-1994
			EP 0686198 A1	13-12-1995
			JP 8507210 T	06-08-1996
			WO 9419484 A1	01-09-1994
			US 5698406 A	16-12-1997
EP 0803288	A	29-10-1997	EP 0803288 A2	29-10-1997
			JP 10132712 A	22-05-1998
			US 6180062 B1	30-01-2001
			US 6001307 A	14-12-1999
WO 9958245	A	18-11-1999	AU 3624399 A	29-11-1999
			EP 1077771 A1	28-02-2001
			GB 2350678 A	06-12-2000
			GB 2341924 A	29-03-2000
			WO 9958245 A1	18-11-1999
US 5338666	A	16-08-1994	US 5182082 A	26-01-1993
			AT 137798 T	15-05-1996
			AU 640838 B2	02-09-1993
			AU 8965791 A	30-07-1992
			CA 2055706 A1	24-07-1992
			DE 69210424 D1	13-06-1996
			DE 69210424 T2	05-12-1996
			DK 496200 T3	19-08-1996
			EP 0496200 A2	29-07-1992
			ES 2086556 T3	01-07-1996
			FI 920276 A	24-07-1992
			GR 3020252 T3	30-09-1996
			JP 2096899 C	02-10-1996
			JP 4315946 A	06-11-1992
			JP 8012135 B	07-02-1996
			NO 914875 A	24-07-1992
			NZ 240604 A	27-06-1994
WO 9960397	A	25-11-1999	AU 3771599 A	06-12-1999
			EP 1046032 A1	25-10-2000
			WO 9960397 A1	25-11-1999